

FINAL PRODUCT BREAKDOWN

TEAM: 19F16 Rural Food Processing

Due Date:
Friday, March 27, 2020 at 11:59pm

Completed System:



Figure 1: Disassembled Roller

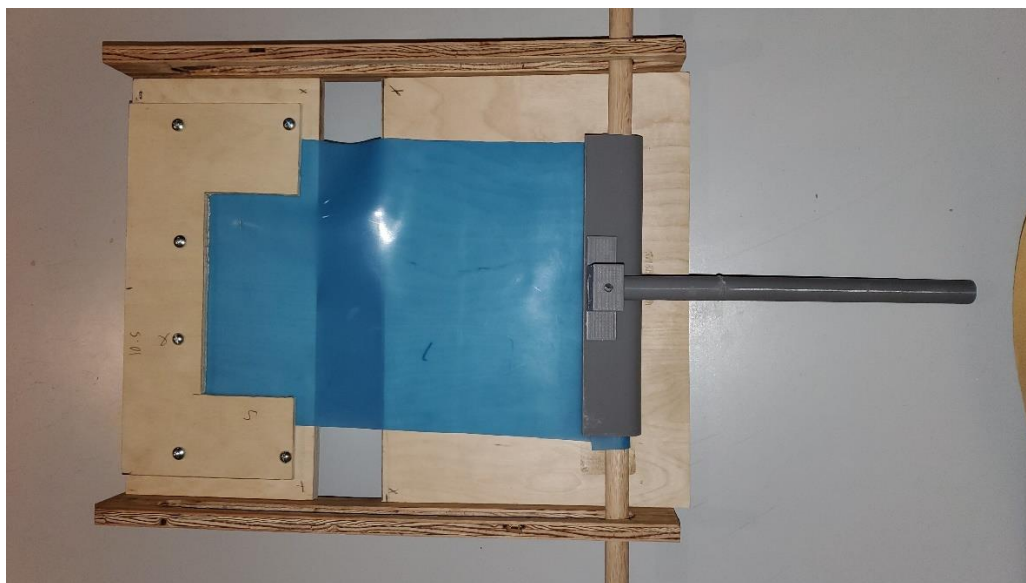


Figure 2: Assembled Roller



Figure 3: Disassembled Dispenser



Figure 4: Assembled Dispenser

The following are the Action Items each person completed between Hardware Review 2 and the completion of the final product:

Team Member: Humoud Alanjari

Action Item	Date Completed	Result/Proof of Completion
Poster Draft	3/13/2020	Helped Editing the poster draft for submission
Individual Analysis (Durability Analysis)	3/13/2020	Durability analysis on the roller is completed in which the findings were that the roller will with stand 10 kg of force applied at the middle. If the roller was made from plexiglass or common wood.
Documenting all team meetings minutes	3/27/2020	All team minutes are uploaded on the team website.

Team Member: Musab Al-Balool

Action Item	Date Completed	Result/Proof of Completion
Draft Poster	3/13/2020	Edited sections of the draft poster
Force Analysis (Individual Analysis)	3/13/2020	Analyzed different forces on the handle of the roller device using two different materials (wood & plexiglass).

Team Member: Nygel des Vignes

Action Item	Date Completed	Result/Proof of Completion
Order materials for new wood prototype	3/11/20	Received more plywood and dowels for second prototype
Build new prototype	3/14/20	Second wood prototype with fixed rails
Document building prototype	3/14/20	Recorded videos of manufacturing process
Test new roller and palm oil on base	3/27/20	Roller functions properly with the added palm oil under silicon
Individual Analysis Finite Element Analysis	3/12/20	Wood meets material properties to support 44kn load

Team Member: Samantha Morrison

Action Item	Date Completed	Result/Proof of Completion
Viscosity Testing	3/9/2020	Data for trials at different temperatures has been collected for reporting
Deflection Analysis (Individual Analysis)	3/13/2020	Deflection analysis of the roller bar and end of the device completed and put into report format

Poster Draft	3/13/2020	Contributed to and edited the current poster draft for submission
Website Updates	3/27/2020	Updated team website to include additional documents and gallery images

The following are the Action Items for each team member between the Final Product presentation and the Testing Proof:

Team Member	Action Items	Date Due
Humoud Alanjari	<ol style="list-style-type: none"> 1. Operation Manual 2. Final Report 3. U grad video 4. Implementation Memo II 5. Document all upcoming meeting minutes 6. Final presentation 	<ol style="list-style-type: none"> 1. 5/1/2020 2. 5/1/2020 3. 4/17/2020 4. 4/3/2020 5. 5/1/2020 6. 4/13/2020
Musab Al-Balool	<ol style="list-style-type: none"> 1. Operations/ Assembly Manual 2. Presentation 3. UGRAD poster & Video 4. Implementation Memo II 5. Final Report 	<ol style="list-style-type: none"> 1. 5/1/2020 2. 4/13/2020 3. 4/17/2020 4. 4/3/2020 5. 5/1/2020
Nygel des Vignes	<ol style="list-style-type: none"> 1. Ugrads Video 2. Operation Manual 3. List of assembly procedures 4. Final Report 5. Test time to roll 6. Implementation Memo 	<ol style="list-style-type: none"> 1. 4/17/2020 2. 5/1/2020 3. 4/5/2020 4. 5/1/2020 5. 4/10/2020 6. 4/3/2020
Samantha Morrison	<ol style="list-style-type: none"> 1. CAD Drawing Package 2. Operations/Assembly Manual 3. Rheometry Report 4. Presentation and Video 5. Implementation Memo II 6. Final Poster/UGRADS Video 7. Final Report 	<ol style="list-style-type: none"> 1. 5/3/2020 2. 5/1/2020 3. 4/24/2020 4. 4/13/2020 5. 4/3/2020 6. 4/17/2020 7. 5/1/2020